

IN THE CLAIMS:

Please amend the claims to read as indicated herein.

1. (Currently amended) A method, carried out by a status engine, of monitoring services of an information technology (IT) environment, comprising:

storing a representation of a service hierarchy, the stored representation comprising service elements representing the services of the IT environment, wherein each service element has an associated service status, the service hierarchy comprising superordinate and subordinate service elements, wherein the status of a superordinate service element depends on at least one of the statuses of one or more subordinate service elements;

calculating the status of a superordinate service element ~~by considering status dependency and propagation between service elements within the service hierarchy~~ according to one or more rules,

wherein the calculation is based on at least i) a status of the superordinate service received in a message from the IT environment and ii) an independently received status of the at least one subordinate service element, and

wherein the rules define the dependency of the status of the superordinate service element on at least one of the statuses of one or more subordinate service elements and the propagation of one or more statuses from one or more subordinate service elements to the superordinate service element, the rules comprising at least one of:

- a) a rule that is based on additional attributes of the service element other than the status;
- b) a rule that ignores subordinate service elements;

c) a rule that is defined by a user on the basis of at least one of i) logical and ii) arithmetical operations of the status or said additional attributes of subordinate service elements ; and

d) a rule that is programmed individually by a user.

2. (Previously presented) The method of claim 1, wherein the rules, when the status of the at least one superordinate service element is calculated, include:

status propagation rules that each have as an input only one parameter, wherein the parameter is the status of the at least one subordinate service element, and

status calculation rules that have as an input one or more parameters selected from the group consisting of: the propagated status of the at least one subordinate service elements, messages coming from services of the IT environment, and additional attributes.

3. (Previously presented) The method of claim 1, wherein the calculation of the status of the at least one superordinate service element depends on any combination of three different types of input data: the status of the at least one subordinate service element, messages affecting the at least one superordinate service element and the additional attributes of the service elements.

4. (Previously presented) The method of claim 1, wherein the additional attributes can take values that are different from possible values of the status of the service elements.

5. (Previously presented) The method of claim 1, wherein the status of the at least one superordinate service element is only calculated if certain attributes of the at least one superordinate service element are set.

6. (Previously presented) The method of claim 1, wherein specific subordinate service elements of the at least one subordinate service element are individually treated for the calculation of the status of the at least one superordinate service element.

7. (Original) The method of claim 1, wherein user-specific external data is included in the rules.

8. (Original) The method of claim 1, wherein time of the day information is included in the rules.

9. (Currently amended) A computer system for monitoring services of an information technology (IT) environment, wherein the computer system monitors the services based on a service hierarchy, wherein a stored representation of the service hierarchy includes service elements representing services of the IT environment and each having an associated service status, wherein the service elements include at least one superordinate service element and at least one subordinate service element, wherein a status of the at least one superordinate service element depends on a status of the at least one subordinate service element, the system comprising:

a status engine for calculating the status of at least one of the service elements, wherein the ~~status engine can calculate the status of the at least one superordinate service element by considering status dependency and propagation between the service elements within the service hierarchy~~ calculation is based on at least i) a status of the superordinate service received in a message from the IT environment and ii) an independently received status of the at least one subordinate service element, and, according to one or more rules;

a user interface for configuring the rules; and

a graphical display for visualizing monitoring results,

wherein the rules define the dependency of the status of the at least one superordinate service element on the status of the at least one subordinate service element and a propagation of the status from the at least one subordinate service element to the at least one superordinate service element, and

wherein the rules include at least one of:

- a) a rule that is based on additional attributes of at least one of the service elements other than the status;
 - b) a rule that ignores the at least one subordinate service element;
 - c) a rule that is defined by a user on the basis of at least one of i) logical and ii) arithmetical operations of the status or the additional attributes of the at least one subordinate service element; and
- a rule that is programmed individually by a user.

10. (Original) The computer system of claim 9, wherein the interface for configuring the rules is a graphical user interface.

11. (Original) The computer system of claim 9, wherein the interface for configuring the rules is an application programming interface to other programming languages.

12. (Previously presented) The computer system of claim 9, wherein the interface for configuring the rules is a script programming language of which a syntax is provided by the status engine.

13. (Previously presented) The computer system of claim 9, wherein the status engine is capable of handling a graph structure of the IT network of services in which each of the services can have one or more depending services and one or more services on which each of the services depends.

14. (Original) The computer system of claim 9, wherein the dependencies between the services of the IT environment are visualized as a graphical representation.

15. (Previously presented) The computer system of claim 14, wherein the status and status changes of the service elements are visualized in a graphical representation.

16. (Currently amended) A computer program product including program code, when executed on a computer system, for carrying out, by a status engine, a method for monitoring services within an information technology (IT) environment,

wherein the method includes storing a representation of a service hierarchy, wherein the stored representation includes service elements representing the services of the IT environment and each having an associated service status, wherein the service hierarchy includes at least one superordinate service element and at least one subordinate service element, and wherein a status of the at least one superordinate service element depends on a status of the at least one subordinate service element,

wherein the method includes calculating the status of the at least one superordinate service element ~~by considering status dependency and propagation between the service elements within the service hierarchy~~ according to one or more rules, wherein the calculation is based on at least i) a status of the superordinate service received in a message from the IT environment and ii) an independently received status of the at least one subordinate service element, wherein the rules define the dependency of the status of the at least one superordinate service element on the status of the at least one subordinate service element and a propagation of the status from the at least one subordinate service element to the at least one superordinate service element, and

wherein the rules include at least one of:

- a) a rule that is based on additional attributes of at least one of the service elements other than the status;

- b) a rule that ignores the at least one subordinate service element;
- c) a rule that is defined by a user on the basis of at least one of i) logical and ii) arithmetical operations of the status or additional attributes of the at least one subordinate service element; and
- d) a rule that is programmed individually by a user.

17. (Original) The computer program product of claim 16, wherein the program code provides an interface to the user for configuring the rules.

18. (Previously presented) The computer program product of claim 17, wherein the interface for configuring the rules is a graphical user interface.

19. (Previously presented) The computer program product of claim 17, wherein the interface for configuring the rules is an application programming interface to other programming languages.

20. (Previously presented) The computer program product of claim 17, wherein the interface for configuring the rules is a script programming language of which syntax is provided by the status engine.

21. (Previously presented) The method of claim 1, wherein the status of at least one of the service elements further depends on one or more messages coming from services of the IT environment and affecting the status of the at least one of the service elements and wherein the rules further define the dependency of the status of the at least one of the service elements on the messages.

22. (Previously presented) The computer system of claim 9, wherein the status of at least one of the service elements further depends on one or more messages coming from services of the IT environment and affecting the status of the at least one of the service elements and wherein the rules further define the dependency of the status of the at least one service elements on the messages.

23. (Previously presented) The computer program product of claim 16, wherein the status of at least one of the service elements further depends on one or more messages coming from services of the IT environment and affecting the status of the at least one of the service elements and wherein the rules further define the dependency of the status of the at least one of the service elements on the messages.